LVR initial QA checklist

1. Put on **wrist strap**, take new LVR from box, **visually inspect i**t and **set all switches** to the values below**.**

	CCMs	FPGA side		
	SW1	SW3	SW2	SW5
All	0001	1111	1111	1000

	CCMs
	SW6[ABCD]
1.2V	1010
1.5V	1100
2.5V	1000

	FPGA
	SW4
A	0000
MS	1111
MSA	1100

2. Place the **LVR in the holde**r and **plug the input BB**.
3. Place **serial number sticker** and **choose type in database**.
4. Verify that the **chassis and power ground are isolated** by > 25k Ω.
5. **Connect jumpers** between **J22** pins 2/4 and 1/3.
6. Connect the **raspberry Pi LVR monitor**.
7. **Turn on PS** set to **1.6V** and max 2A.
8. **Adjust the P1, P2, and P5** pots so that the 1.5V, 3.3V, and 5.5V rails are set to those values.
9. **Adjust the P3 and P4** pots so that voltages for TP9-TP10 and TP14-TP15 are 1.483V (1.2V LVR), 1.546V (1.5V LVR), or 1.775V (2.5V LVR).
10. **Program the FPGA**
11. Turn off power, install CCMs
12. Turn on power, check **UVL turns all channels OFF with input voltage** 4.3V (12A), 4.8V (15MS), 5.3V (25A)
    - Set input voltage back to 6V when you've checked
13. Change **SW1** to 0011 (or 1111), check over-temperature turns **channels off, LD7 LED turns on**
14. Check sense lines with RJ45 breakout board
15. Check you can read WORD2 (fw version) with SPI, and that after grounding the green floating wire (RESET), SPI always responds 00000000
16. Disconnect everything, and place colored stickers for each CCM.
17. **Update the database**, and you are done!